



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

Applicant	Inventor	Attorney	Agent	Class
Eastman Kodak Company	Nguyen, Huu T.	Nguyen, Huu T.	Nguyen, Huu T.	7204

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EXAMINER

NGUYEN, HUU T.

APPLICANT

Patent No. 7204

DATE MAILED 07/07/2004

Please find below and or attached an Office communication concerning this application or proceeding.

Application No.

Applicant(s)

09/750 745

GUIDASH, ROBERT M

**Office Action Summary**

Examiner

Art Unit

Tu T. Nguyen

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited, PTO-892             | 4. <input type="checkbox"/> Interview Summary, PTO-413, Paper No. s        |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review, PTO-948    | 5. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152 |
| 3. <input type="checkbox"/> Information Disclosure Statement(s), PTO-1449, Paper No. s | 6. <input type="checkbox"/> Other  |

Detailed Office Action

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gowda et al (6,344,877) in view of Merrill (5,614,744).

With respect to claim 1, Gowda discloses a pixel image sensor. The sensor comprises: a photodetector 7 (fig 1), a transistor 13 (fig 1), a charge to voltage conversion 6 (fig 1).

Gowda does not disclose a capacitor connected in parallel with the charge voltage conversion. Merrill discloses a capacitor C1 (fig 3) connected in parallel with the charge voltage conversion d2 (fig 3). It would have been obvious to modify Gowda with Merrill's capacitor to enhance performance.

Merrill does not explicitly disclose the capacitor designed to have a low voltage coefficient. However, the low voltage coefficient capacitor would have been known. It would have been obvious to modify Merrill with the known low voltage coefficient capacitor to make the system more efficient.

With respect to claims 2,7, since the connection in Merrill is the same as the claimed invention, the capacitor provides a capacitance independent of a voltage on the charge to voltage conversion mode would have been inherent.

With respect to claims 3-5,8-10, the claimed capacitors would have been known in the art. It would have been a design choice to modify Merrill with different capacitor types to use in different environments. The modification involves only routine skill in the art.

With respect to claim 6, refer to discussion in claim 1. Further, it would have been obvious to modify Gowda's photodetector to operate as a charge to voltage conversion to make the sensor smaller.

With respect to claim 12, refer to discussion in claim 1 above. Further, it would have been obvious a design choice to modify Gowda's transistor to operate as a common source amplifier for better performance.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gowda et al (6,344,877).

With respect to claim 11, Gowda discloses a pixel image sensor. The sensor comprises: a photodetector 7 (fig 1), a transistor 13 (fig 1), a charge to voltage conversion 6 (fig 1).

Gowda does not explicitly disclose configuring the transistor to operate as a common source amplifier. However, it would have been obvious a design choice to modify Gowda's

transistor to operate as a common source amplifier for better performance.

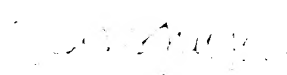
*Response to Arguments*

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T Nguyen whose telephone number is (703) 306-9185. The examiner can normally be reached on M-T 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
**Tu T. Nguyen**  
**Primary Examiner**  
**Group Art Unit 2877**